### State of Utah Department of Environmental Quality Division of Drinking Water

# Utah Water Operator Certification Program



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### **FOREWORD**

The Utah Drinking Water Board takes great pride in our program to certify operators of public drinking water systems. We hope that the information contained in this brochure assists you to understand and appreciate this basic public health program.

Utah's Operator Certification Program progressed from a *voluntary* to a *required* certification system in 1983 with the passage of amendments to the Utah Safe Drinking Water Act by the Utah Legislature. Rules concerning the certification of drinking water system operators within the state have been written, reviewed, revised, approved and implemented. These rules detail the requirements for, and the renewal of, certification.

The Utah Drinking Water Board appreciates the genuine hard work of the Operator Certification Commission, Division of Drinking Water staff, and the drinking water system operators and managers throughout Utah. Through our combined efforts, program implementation has been smooth and most impressive.

Thank you for your continued support of the program and your dedication to safe drinking water.

Utah Drinking Water Board

### Utah Department of Environmental Quality, Drinking Water Board members:

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Daniel Fleming

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Kenneth Bassett

Petra Rust

Jay Franson

David Stevens

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Rick Sprott

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### **Key Features of the Utah Operator Certification Program**

- The Utah Operator Certification Rules are established to promote use of trained, experienced, and efficient personnel in charge of public waterworks and to establish standards whereby operating personnel can demonstrate competency to protect the public health through proficient operation of waterworks facilities.
- Utah's Operator Certification Program is authorized by Section R309-105-11 of the Utah Public Drinking Water Rules. The rules state that "All community and nontransient noncommunity water systems or any public system that employs treatment techniques for surface water or ground water under the direct influence of surface water shall have an appropriately certified operator. Refer to Section 309-300, Certification Rules for Water Supply Operators, for specific requirements."
- All public drinking water systems within the state of Utah have been assigned a complexity level (I, II, III, IV) and discipline (Treatment or Distribution) for the certification requirements of their operators. Any operator who makes independent decisions that affect the sanitary quality, safety, and adequacy of the water to their system will need to be certified to the grade of the system.
- Attendance at approved training such as workshops, seminars, classes, etc., is required for the renewal of certificates every three years.
- When an operator who is "in charge" of a drinking water system leaves that particular employment, the water system management or city/town council must notify the Operator Certification Program of this change within 10 days of the operator's departure, and replace the departing operator with an appropriately certified operator within one year.
- Should several neighboring drinking water systems wish to work together, they may hire a "regional operator" who may be "in charge" of several drinking water systems; thereby, reducing the costs of having a certified operator for each drinking water system.
- Should someone other than an operator, or an individual who is seeking employment with a Utah drinking water system (consultants, design engineers, salespersons, etc.), wish to become certified, they may take the certification examination and be issued a "Specialist Certificate." This certificate does not allow a "Specialist" to actually operate a drinking water system.

FOR MORE INFORMATION about this program, or to obtain copies of program forms, please contact the Division of Drinking Water office at (801) 536-4200, or visit the website at http://www.drinkingwater.utah.gov.

### **How Do I Become A Certified Operator?**

By Utah law, all community and nontransient noncommunity water systems or any public system that employs treatment techniques for surface water or ground water under the direct influence of surface water shall have an appropriately certified operator in direct responsible charge of the system.

If you are an individual looking for employment within the drinking water industry in the state of Utah, you may become certified as an operator.

The only way to become certified is by taking a written or oral examination, or currently be certified as an operator in another state and apply for reciprocity. Certification is divided into two disciplines:

Distribution: There are five grade levels within the distribution discipline (small system, and I, II, III, IV)

Treatment: There are four grade levels within the treatment discipline (grades I, II, III, IV).

#### DETAILED BREAKDOWN OF EXAMINATION COVERAGE

The examinations offered in water distribution and water treatment can be categorized according to the level of ability and competency of the operator expected to take these exams.

**Small System** - This level is for persons running a very small system with a population of 25-500. A volunteer or elected official usually runs these community or nontransient noncommunity systems.

**Grade I** - This level is for persons running small systems or slow-sand filter, reverse osmosis, or similar types of small treatment facilities.\* The operator at this level in a larger system will generally be closely supervised.

**Grade II** - This level is for persons running a system with a population of 1,500 to 5,000, or small package-type treatment plants.\* This corresponds to a "lead" level position. Through experience and education, the operator has demonstrated himself independently competent in most basic tasks.

**Grade III** - This level is for persons running a system with a population of 5,000 to 20,000 or medium size treatment plants.\* This corresponds to a "journeyman" level position and the person generally supervises and instructs others. They can, without direct supervision, operate and maintain all but the most complex systems.

**Grade IV** - This level is for persons running a system serving over 20,000 population or large treatment plants or plants with complex operational processes.\* This level corresponds to the highest level currently available under the Utah program. It identifies that the person has demonstrated knowledge of the most complex portions of water system operation. The Grade IV operator routinely supervises work crews or groups of work crews. Budget preparation is frequently a duty. It is assumed that a person certified at this level has enough experience and education to operate any other water system serving more than 20,000 people, in compliance with the Utah Public Drinking Water Rules and laws of the state of Utah.

<sup>\*</sup>Treatment plants are rated on population served, degree of treatment, and complexity of operational processes.

### How Do I Become A Certified Operator? (continued)

#### HOW TO APPLY FOR AN EXAM

The operator certification exams are offered twice a year, in the months of April and November, at 16 sites throughout the state of Utah. To apply for participation within the exam cycle, you need to submit an official exam application on or before the application deadline. The application must include the exam fee of \$100.00. Late applications and applications received without the required fee will not be accepted.

All applications will be processed by our staff. You will receive, by mail, a confirmation letter containing the exact date, time and location of the exam.

Certain experience requirements need to be met to obtain an "unrestricted" certificate. If you do not meet these requirements or if you are new in the drinking water industry, and you pass the exam, a "restricted" certificate will be issued. A "restricted" certificate signifies that you have passed the exam, but you lack the experience required by the Operator Certification Rules.

Upon successful completion of the exam you will be notified in writing of your score and will be issued a certificate indicating the discipline and grade level.

This certificate will be active for a three-year period. A reminder letter of renewal will be sent out three to six months prior to the expiration date of your certificate. The Utah Operator Certification Rules require that CEUs (continuing education units) be acquired by the operators to enable the certificate to be renewed.

Individuals with special needs must schedule a separate, private exam date and time. "In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Brooke Baker, Office of Human Resources, at: (801) 536-4412, TDD (801) 536-4424, at least five working days prior to the scheduled meeting."

Division of Drinking Water Operator Certification Program 150 North 1950 West P.O. Box 144830 Salt Lake City, Utah 84114-4830 Phone: 801-536-4200

Fax: 801-536-4211 E-mail: mhand@utah.gov OR kdyches@utah.gov

Website: http://www.drinkingwater.utah.gov

# Nervous About the Certification Exam? We Can Help!

### **Training Events Calendar**

There are several self-paced courses available, as well as formal organized training by the Rural Water Association, American Water Works Association, Utah Valley State College, Water Environment Association of Utah, and the Division of Drinking Water. A water operator training calendar is available online:

http://www.calendarwiz.com/uwwtccal OR http://www.drinkingwater.utah.gov/for certified operators.htm

### **Lending Library**

There is also a library available for your use at our office. We have reference books, state rules documents, videos, CDs and DVDs for water system personnel and anyone preparing for the certification exam. By filling out a library application, you can borrow these items at no charge.

If you have any questions about training or training material, please contact the Operator Certification Program staff at (801) 536-4200.

## Check out the **LENDING LIBRARY**

Call the Operator Certification Program staff at (801) 536-4200 for details



### What Are Continuing Education Units (CEUs)?

The Operator Certification Rules define a CEU as "...ten contact hours of participation in, and successful completion of an organized and approved continuing education experience with responsible sponsorship, capable direction, and qualified instruction."

In order to ensure that the certified operators within the state remain abreast of the technological advances within our water industry, CEUs are required in order for the operators to renew their certificates. This includes operators holding "Grandparent" certificates.

The Operator Certification Rules specify the number of CEUs required per grade for renewal:

|                        | CEUs required within |
|------------------------|----------------------|
| Level of Certification | a three-year period  |
| Small System           | 2.0                  |
| Grades I and II        | 2.0                  |
| Grades III and IV      | 3.0                  |
|                        |                      |

There is no distinction between distribution and treatment disciplines when it comes to CEUs, only the grade of the certification the operator currently holds.

CEUs can only be acquired by attending pre-approved workshops, seminars, training, and classes which have been designed to keep the operator abreast of current water supply practices as well as all new changes within the regulations and industry standards. An attendance roster from these workshops is sent to the Operator Certification Program for entry into the computer base for tracking purposes.

Upon receiving an "application for renewal," the Division of Drinking Water's computer is checked to make sure enough CEUs have been acquired by the operator to enable him to renew his certificate. If that operator lacks sufficient CEUs, the renewal of certification will be denied.

Individual CEU records for certified operators are available at the Division of Drinking Water office. Contact the Operator Certification Program staff to request your free operator record.

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Fax: 801-536-4211

E-mail: mhand@utah.gov OR kdyches@utah.gov Website: http://www.drinkingwater.utah.gov

### **Operator Certification Commission**

The Operator Certification Commission consists of seven members, which includes higher education representatives, a treatment operator, a distribution operator, a service district representative, a metropolitan water district representative, and a rural water system representative. These seven people make decisions such as what topics you, as an operator, will be tested on; when the test will be issued; how the program will be managed; how the program will operate; and how your exam fees and renewal fees will be spent to support the Operator Certification Program.

This commission is also the body that will hear all operator appeals, and will initiate any compliance activities for enforcement of the rules concerning certified operators. This commission also proposes rules, modifications, changes, and interpretation of the rules by which operators must abide. These rules, following the public hearing process, are actually adopted by the commission.

Operator Certification Commission members:

Mark Clark, Chair
Bart Simons, Vice-Chair
James Callison
David Stevens
Jay Franson
Craig Fahrni
Gary Larsen
Kim Dyches, Secretary

# Water Operator Certification 2009 Exam Schedule

ATTENTION ALL WATER SYSTEM OPERATORS AND MANAGERS, AND ANYONE SEEKING EMPLOYMENT IN THE WATER INDUSTRY. Utah's Department of Environmental Quality, Division of Drinking Water (DDW), is offering operator certification exams for water distribution and treatment systems. All grade levels, including small systems, will be offered:

► April 9, 2009, at 16 Utah exam sites (see exam application for list of cities). Exam application deadline: March 19, 2009.

► November 12, 2009, at 16 Utah exam sites (see exam application for list of cities). Exam application deadline: October 22, 2009.



#### ADDITIONAL EXAM DATES AND TRAINING

The Rural Water Association of Utah (RWAU) will sponsor certification exams in conjunction with their annual conferences:

- ▶ Operator Exam: March 6, 2009 (St. George) → Certification Review Class: March 3-5, 2009
- ▶ Operator Exam: September 2009 (Layton) → Certification Review Class: September 2009

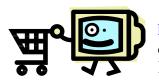
For more information, contact RWAU: Telephone (801) 756-5123; Website http://www.rwau.net.

#### HOW TO REGISTER FOR AN EXAM

Fill out the official 2009 exam application completely and mail it, along with the \$100.00 fee, to: Division of Drinking Water, Operator Certification Program, 150 North 1950 West, P.O. Box 144830, Salt Lake City, Utah 84114-4830. Make the check or money order payable to the "Division of Drinking Water (DDW)."

Examination Fee: \$100.00

The exam application and fee must arrive at the Division of Drinking Water office on or before the deadline listed on the announcement. Applications and fees received after the deadline will not be accepted. A confirmation letter will be mailed to all applicants. If you do not receive your confirmation letter, please contact the Operator Certification Program staff immediately at (801) 536-4200, or E-mail: mhand@utah.gov.



Apply Online: You can apply to take an exam and pay your exam fee online at: http://www.drinkingwater.utah.gov (go to DDW Shopping Cart). The date listed on your credit card E-check receipt will be considered your actual application submittal date. Important note: If you apply and pay online on or before the application deadline, please remember to mail, fax or e-mail your completed application and your receipt to the DDW

office as soon as possible so that your name can be added to the exam reservation list. DDW fax #: 801-536-4211.

Exam Cancellation Policy: Only one cancellation, per applicant, is allowed. An applicant making a written or phone-in cancellation by 9:00 a.m. on the day of the exam may request a refund of the exam fee or take the next scheduled exam. If the applicant should also cancel the next scheduled exam, the exam fee will be forfeited.

### 2009 EXAM APPLICATION

New information is contained in this version of the application. The 2009 exam application is available online, or you may request a copy by telephone: (801) 536-4192, or by e-mail: <a href="mailto:mhand@utah.gov">mhand@utah.gov</a>.

### Training Events Calendar for Water and Wastewater

The Utah Water and Wastewater Training Coalition has assembled a new **Training Events Calendar** for individuals who need to prepare for the State of Utah operator certification exam, and for operators who are required to meet training requirements for certification renewal. The calendar is available online at:

# http://www.calendarwiz.com/uwwtccal OR http://www.drinkingwater.utah.gov/for\_certified\_operators.htm

If you don't have access to a computer, you may request a copy of the calendar by contacting the Division of Drinking Water.

Water and wastewater training events are sponsored by the following organizations:

| ABPA | American Backflow Prevention Association                   | (801) 949-5512 |
|------|--|----------------|
| AWWA | American Water Works Association (Small Systems Committee) | (801) 536-4216 |
| DDW  | Division of Drinking Water                                 | (801) 536-4200 |
| DWQ  | Division of Water Quality                                  | (801) 538-6062 |
| RWAU | Rural Water Association of Utah                            | (801) 756-5123 |
| WEAU | Water Environment Assn of Utah (PWOD Representative)       | (435) 649-7993 |

If you have questions about the calendar, feel free to contact the Division of Drinking Water certification program staff:

Division of Drinking Water Operator Certification Program 150 North 1950 West P.O. Box 144830 Salt Lake City, Utah 84114-4830

Telephone: (801) 536-4200

Fax: (801) 536-4211 E-mail: jyee@utah.gov E-mail: mhand@utah.gov E-mail: kdyches@utah.gov

# **Utah Operator Certification Rules Rule 309-300 Summary**

### **Summary**

These rules cover the certification of water system operators.

### Coverage

The rules apply to all community and non-transient non-community drinking water supply systems serving more than 25 individuals, and all public drinking water systems that utilize surface water sources or groundwater under the direct influence of surface water.

### General

There are two classifications of certified operators: a) Certified operators are individuals who are actively involved in operating public water systems, and b) Certified water specialists are those involved with the water industry but not actively involved with operating a public water system. Distribution system or treatment plant managers are required to be certified at the grade of the waterworks system with an appropriate unrestricted certificate. All other direct responsible charge (DRC) operators shall be certified at the classification of the water system. Where 24-hour shift operation is used or required, one operator per shift must be certified at the classification of the system operated.

When a system required to have a certified operator finds itself without one, they must obtain an appropriately certified operator within one year, or four examination cycles, whichever is longer. An operator who is acting as the DRC operator for more than one drinking water system shall not be a Grandparent certified operator. A regional operator must have an unrestricted certificate equal to or higher than the grade and discipline of the rating applied to each system he is operating.

### **Examinations**

All examinations shall be given twice a year, generally at each of 15 district health department offices and a Salt Lake City location. If an operator taking the examination fails to pass, he/she may file an application for reexamination. The minimum passing grade for all examinations shall be 70 percent. An individual who has failed to pass two consecutive written examinations of the same discipline and grade may apply to take an oral examination. Examinations will be offered in four grade levels for water treatment and five grade levels for water distribution, covering: a) general water supply knowledge, b) control processes and disinfection in water treatment or distribution, c) operation, maintenance, pumps, safety/security, and emergency procedures, d) proper record keeping, and e) rules, requirements, math and water quality standards.

### **Certificates**

A restricted certificate will be issued to those operators who have passed a higher grade examination than the grade for which they have qualified for by experience. Upon accumulating the necessary experience, these restricted certificates will become unrestricted with the same renewal date. Grandparent certificates will be restricted to the person, position, and water system for which they were issued. Water specialist certificates will be issued to those persons who have met the experience requirements and have successfully passed the written examination. An individual who currently holds a valid certificate and who is no longer directly employed by a Utah drinking water system may request his certificate be converted to a water specialist with the same expiration date.

### *Utah Operator Certification Rules (continued)*

All certificates will expire on December 31, three years from the year of issuance. Failure to remain active in the waterworks can result in denial of certificate renewal. Reinstatement or renewal of a lapsed certificate may occur by payment of the fee and/or passing an examination. Renewal of a lapsed certificate may occur without examination within 6 months of the expiration date. Reinstatement of a lapsed certificate may occur by appealing to the Commission within one year after the 6-month grace period. Training, experience, education and progress made since the certificate lapsed will be considered in the reinstatement process.

### **Certificate Suspension and Revocation Procedures**

The following may be grounds for suspending or revoking a certificate: a) demonstrated disregard for the public health, b) falsification of data, or c) cheating on a certification examination. Any suspension or revocation may be appealed to the Drinking Water Board by filing a request for a hearing with the Executive Secretary.

### **Facility Classification System**

#### WATER TREATMENT CLASSIFICATION

| Grade Level:       | 1             | 2             | 3              | 4           |
|--------------------|---------------|---------------|----------------|-------------|
| Population Served: | 1,500 or less | 1,501 - 5,000 | 5,001 - 15,000 | over 15,000 |

#### DISTRIBUTION CLASSIFICATION

| Grade Level:       | Small System | 1           | 2             | 3              | 4           |
|--------------------|--------------|-------------|---------------|----------------|-------------|
| Population Served: | 25 - 500     | 501 - 1,500 | 1,501 - 5,000 | 5,001 - 15,000 | over 15,000 |

### **CEUs and Approved Training**

The following CEUs shall be obtained by a certificate holder every three years before the individual's certificate can be renewed. Ten hours of approved water-related training equals 1 CEU.

|                   | CEUs required      |
|-------------------|--------------------|
| Classification    | in a 3-year period |
| Small System      | 2 CEUs             |
| Grades I and II   | 2 CEUs             |
| Grades III and IV | 3 CEUs             |

### **Non-compliance with Certification Program**

After appropriate consideration by the Commission, cases of non-compliance will be referred to the Drinking Water Board for appropriate enforcement action.

### Operator Certification Program Fees - Effective July 1, 2006

| Record application                       | none     |
|--|----------|
| Examination (all grade levels)           | \$100.00 |
| Renewal of certificate                   | \$100.00 |
| Reciprocity                              | \$100.00 |
| Reinstatement of lapsed certificate      | \$200.00 |
| Utah Operator Certification Rules (conti | inued)   |

### **Minimum Qualifications for Certification**

## MINIMUM REQUIRED QUALIFICATIONS FOR UTAH WATERWORKS OPERATORS

| Certification Grade | EDUCATION |           |        | EXPER    | IENCE |       |
|---------------------|-----------|-----------|--------|----------|-------|-------|
| (Both Distribution  | Degree    | Associate | High   | Non-High | DRC   | Total |
| and Treatment)      |           | Degree    | School | School   | Years | Years |
|                     | X         |           |        |          | 2     | 4     |
| 4                   |           | X         |        |          | 2     | 6     |
|                     |           |           | X      |          | 4     | 8     |
|                     |           |           |        | X        | 5     | 10    |
|                     | X         |           |        |          | 1     | 2     |
| 3                   |           | X         |        |          | 1     | 2     |
|                     |           |           | X      |          | 2     | 4     |
|                     |           |           |        | X        | 3     | 6     |
|                     | X         |           |        |          | 0     | 2     |
| 2                   |           | X         |        |          | 0     | 2     |
|                     |           |           | X      |          | 0     | 2     |
|                     |           |           |        | X        | 0     | 3     |
|                     | X         |           |        |          | 0     | 1     |
| 1                   |           | X         |        |          | 0     | 1     |
| and Small System    |           |           | X      |          | 0     | 1     |
|                     |           |           |        | X        | 0     | 1     |

## MINIMUM REQUIRED QUALIFICATIONS FOR UTAH WATER SPECIALISTS

| Certification Grade | EXPERIENCE |                      |  |  |
|---------------------|------------|----------------------|--|--|
| (Both Distribution  | "Hands On" | Design or Associated |  |  |
| and Treatment)      | (Years)    | (Years)              |  |  |
| 4                   | 8          | 10                   |  |  |
| 3                   | 4          | 8                    |  |  |
| 2                   | 2          | 4                    |  |  |
| 1 and Small System  | 0          | 0                    |  |  |